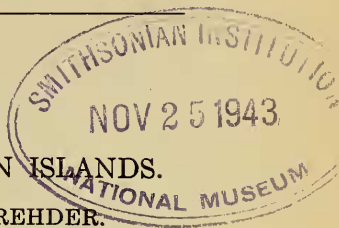


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## NEW CONES FROM THE HAWAIIAN ISLANDS.

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Among the Hawaiian mollusks in the collection of the United States National Museum are a number of cones that require naming. Five of these are described in this paper. Figures of them have been made and will appear in the Monograph of the Hawaiian Gastropods which is in preparation.

*Conus eugrammatus*, new species.

Shell small, cone-shaped, with a moderately elevated spire. The right outline of the basal portion of the shell, when viewed from the opposite side of the aperture, is slightly concave. Fresh, unworn specimens are covered with a thin, grayish white periostracum which forms slender lamellae on the fine riblets of the spire. Denuded specimens have pale buff ground color and on the spire the whorls are marked by distantly spaced, rather regular, broad, brown spots. Anterior to the keel the shell is marked by interrupted spiral bands of brown. Those on the seven flat spiral zones between the incised spiral lines anterior to the keel are rather distantly and irregularly spaced. On the next five spiral zones the interrupted bands are broader and become fused axially, while on the three succeeding zones they are again scattered and irregularly developed. On the rest of the base the brown spots are broader and form axial areas which occupy more space than the lighter intermediate spaces. Inside of the outer lip yellowish white. The early whorls form a slender apex and appear to be smooth. The succeeding turns increase more rapidly and are marked by slender, protractively curved axial riblets which fuse to form strong nodules at the shoulder. The summit of the whorls is also marked by three slender spiral threads. On the later turns the nodulation at the shoulder becomes less conspicuous and practically disappears on the last part of the last whorl. Anterior to the shoulder the whorls are marked by deeply incised spiral grooves which are widest anteriorly. The spaces between these grooves are flat. The entire surface anterior to the shoulder is also marked by fine

incremental lines. Immediately below the shoulder are several more closely approximated spiral grooves which are narrower than those anterior to this place. Aperture narrow, with the sinus at the shoulder shallow. Outer lip thin, slightly protracted. The inner lip is slightly sigmoid.

The type, U. S. N. M. No. 173213, was dredged by the U. S. Bureau of Fisheries Steamer *Albatross* at Station 3889 off the north coast of Molokai Island near Mokapu Islet. It was 8.5 whorls remaining and measures: Height, 30 mm.; greater diameter, 15.9 mm.

U. S. N. M. No. 335304 contains a specimen dredged by the *Albatross* at Station 3856 in Pailolo Channel in 127 fathoms on fine sand and yellow mud bottom; bottom temperature, 66.5° F.

U. S. N. M. No. 190415 contains 2 specimens dredged by the *Albatross* at Station 3810 off the south coast of Oahu Island in 211-53 fathoms on fine coral sand bottom; bottom temperature, 47.7° F.

This species most nearly resembles *C. maculospira* Pilsbry and Johnson 1922 (= *C. planiliratus* Sowerby, 1870, not Sowerby, 1849, which Sowerby stated came from the China Sea). It differs from this, however, in the color pattern.

*Conus hammatus*, new species.

Shell small with moderately elevated spire. The left outline is slightly concave near the base. General color scheme buff with a faint, almost obsolete, lighter zone immediately anterior to the shoulder, and another even paler on the middle of the last whorl; while the summit of the whorls is marked by more or less regularly spaced axial spots of reddish brown. Interior of aperture bluish white. The entire surface is covered by a moderately strong periostracum which forms very regularly developed and distributed wavy thread-like incremental lines. The whorls on the top of the spire are separated by a well-impressed suture and are marked by three low, rounded, spiral threads and protractively slanting, almost riblike, closely spaced incremental lines. The shoulder shows the merest tendency to knobbing. Anterior to the shoulder the surface bears 32 spiral threads which vary in strength, the spaces between the stronger ones bearing 1-3 finer elements. These threads are feebly nodulose, the nodules varying in strength, corresponding to that of the threads. Aperture narrow, widening basally, concavely incised at the summit; outer lip thin and sharp at the edge; inner lip concave with a thin callus.

The type, U. S. N. M. No. 173225, was dredged by the U. S. Bureau of Fisheries steamer *Albatross* at Station 4128 near Kauai Island in 253-179 fathoms on coarse broken coral, sand, and foraminifera bottom; bottom temperature, 47.8° F. It measures: Height, 22.5 mm.; greater diameter, 12 mm.

U. S. N. M. No. 190416 contains 2 topotypes from the same source.

This species resembles *C. lividus* but is smaller and has the knobbing at the shoulder scarcely indicated. It also lacks the purple lip of the base.

*Conus spiceri*, new species.

Shell large, with low, slightly concave spire. The left outline between the shoulder and base is also slightly concave in the middle. The entire surface of the shell is covered by a thick, raw umber colored periostracum, which when removed shows a pale yellow shell. The interior of the aperture is bluish white. The whorls are separated by a slender impressed suture and marked by protractively curved incremental lines and a single slender spiral thread. The shoulder is sharply angulated. Between this and the base the last whorl is marked by fine incremental lines and very slender, closely spaced, spiral threads which become heavier and somewhat more distantly spaced anteriorly. Aperture moderately broad, widening slowly anteriorly. Peristome concavely excised at the summit.

The type, U. S. N. M. No. 537792, was collected by Mr. V. D. P. Spicer on Sand Island, Midway Island atoll, Hawaiian Islands. It measures: Height, 67.5 mm.; greater diameter, 41 mm.

This species resembles *C. quercinus* 'Solander' Humphreys 1786, but lacks the delicate chestnut colored spiral lines. It also has a flatter spire and only one spiral thread on the summit of the turns.

We take pleasure in naming it for its discoverer who has added many fine things to the collection of the U. S. National Museum.

*Conus smirna*, new species.

Shell rather large, slender for the genus, very regularly biconic. The spire is well elevated with straight sloping sides almost equal to one-quarter of the entire height of the shell. The surface is covered by a thin, yellow-ochre-colored, smooth periostracum with a broad, slightly lighter zone about halfway between the angled shoulder and the base, and of about equal width at the base. Interior of the aperture bluish white. The early whorls bear strong, equal and equally spaced, nodules at the shoulder which are separated by spaces a little wider than the nodules. These nodules become gradually and successively weakened on the succeeding whorl and disappear completely on the last turn. In addition to the nodules, the summit of the whorls is marked by fine incremental lines and equally fine spiral lirations. Anterior to the shoulder the last whorl is marked by incremental lines and spiral lirations. These consist of very fine hair lines on the posterior part which gradually increase in strength anteriorly, forming rather strong spiral threads basally. Aperture moderately broad, of almost the same width throughout. Outer lip thin, slightly excised on the shoulder.

The type, U. S. N. M. No. 173226, was dredged by the U. S. Bureau of Fisheries steamer *Albatross* at Station 4132, near Kauai in 257-312 fathoms on fine gray sand and mud bottom; bottom temperature, 46.8° F. It measures: Height, 60.9 mm.; greater diameter, 22.8 mm.

We know of no closely related species.

**Conus halitropus**, new species.

Shell of medium size and elongate-ovate outline with moderately elevated spire. The entire surface is marked by irregularly shaped and distributed blotches, zones, and dots of pale raw sienna; the lighter areas separating these are flesh-colored. The last whorl is decidedly descending. The suture separating the whorls is a mere impressed line. The summit of the whorls is gently sloping and is marked by slender thread-like incremental lines and equally strong spiral lirations, the combination producing a fine screen-like pattern. Anterior to the shoulder the shell is marked by almost obsolete incremental lines and equally ill-defined spiral lirations on the posterior half; while the anterior half is marked by weak, rounded spiral threads. Aperture rather broad, widening anteriorly, with a moderately deep sinus at its summit. Outer lip thin; inner lip glazed with a thin callus.

The type, U. S. N. M. No. 338579, was collected by Mr. D. Thaanum at a dredger dump at Honolulu. It measures: Height, 32.5 mm.; greater diameter, 13.8 mm.

U. S. N. M. No. 537793 contains a topotype from the same source.

This species most nearly resembles *C. obscurus* Reeve 1843, which came from Masbate, Philippine Islands, but can easily be distinguished from this by being of lighter color and in lacking the spiral color lines in the blotches.